

Table 2. *MANUFACTURING & FABRICATION TECHNOLOGIES*<sup>1</sup>

Technology Areas	CHINA	U.S.	RUSSIA	JAPAN	GERMANY	U.K.	FRANCE
Advanced Fabrication & Processing	2	4	2	4	4	4	4
Bearings	2 4		2 3		4	3 4	
Metrology <sup>2</sup>	1	4	2	3	4	4	3
Non-destructive Inspection & Evaluation <sup>3</sup>	1	4	2	3	4	2	4
Production Equipment	2	4	2	4	4	3	4
Robotics	1	4	2	4	2	1	2

**Legend:** Production Capabilities: 0 = No Capability or no consensus 1 = Limited 2 = Some 3 = Majority 4 = All

1. The level of this technology directly effects the cost, reliability, and level of military hardware that can be produced.
2. State-of-the art hardware requires precision measurement for both development and manufacturing. The extensive list includes ships, aircraft, missiles, propellers, bearings, avionics, etc.
3. Technologies essential for detecting problems in design and manufacture, and in delivered hardware. Additionally these technologies can provide the basis for determining reliability and maintenance requirements.